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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/396,352 09/14/99 TUMER

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WM01/0118

EXAMINER

HIANG, S

ART UNIT

PAPER NUMBER

2632

DATE MAILED:

01/18/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/396,352

Applicant(s)

Tumay O. Tumer

Examiner

Sihong Huang

Group Art Unit
2632



☒ Responsive to communication(s) filed on Oct 13, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1, 3-22, and 24-26 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1, 3-22, and 24-26 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Response to Amendment

1. This Office Action is responsive to the amendment filed October 13, 2000. As directed by the amendment, the specification has been amended accordingly, claim 23 has been canceled, claims 1, 3-15, 21, 22 and 24-26 have been amended, and no new claim has been added. Thus, claims 1, 3-22 and 24-26 are presently pending in this patent application with claims 1 and 3 being the independent claims.

Claim Rejections - 35 U.S.C. § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-10, 12, 13, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Murdoch (U.S. Pat. No. 5,153,583).

Regarding claim 1, Murdoch discloses an ID tag (transponder, see Fig. 1) for application to article (col. 1, lines 14-15 and col. 8, lines 58-65) comprising in combination: an application specific IC die (IC chip, see Figs. 17 and 18) having; a write control component for writing

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information and programming into the IC (col. 7, lines 27-29 and col. 8, lines 26-31), a read control component for reading out information from the IC (col. 7, lines 27-29 and col. 8, lines 22-26), a first antenna component for receiving radio wave energy, and a second antenna component for transmitting information from the IC to a receiver (col. 13, lines 14-17); and at least one capacitor (cs.) for storing the radio wave energy received by the first antenna and for supplying energy to the IC (col. 13, lines 64-66, col. 14, lines 44-49 and col. 18, lines 39-42), wherein all components are located on the die (col. 18, lines 29-32).

Regarding claim 3, Murdoch discloses an ID tag (transponder, see Fig. 1) for application to article (col. 1, lines 14-15 and col. 8, lines 58-65) comprising in combination: an application specific IC on a die (IC chip, see Figs. 17 and 18) having, a write control component for writing information and programming into the IC (col. 7, lines 27-29 and col. 8, lines 26-31), a read control component for reading out information from the IC (col. 7, lines 27-29 and col. 8, lines 22-26), and an antenna component for receiving and transmitting information from the IC to a receiver (col. 8, lines 14-31), wherein all components are located on the die (col. 18, lines 29-32).

Regarding claims 6-9, Murdoch discloses the claimed antenna (col. 8, lines 14-31).

Regarding claims 4, 5 and 10, Murdoch discloses a component (Cs.) that stores radio wave energy received by the antenna and powers the ID tag (col. 13, lines 64-66, col. 14, lines 44-49 and col. 18, lines 39-42).

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Regarding claims 12 and 13, Murdoch discloses a nonvolatile memory (col. 14, line 68; also see Figs. A, B and E).

Regarding claim 20, Murdoch discloses a clock generating circuit component (col. 16, lines 6-7).

Regarding claim 21, Murdoch discloses a shift register circuit component (see Fig. 16B).

4. Claims 3-10, 12, 13, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Carroll (U.S. Pat. No. 4,857,893).

Regarding claim 3, Carroll discloses an ID tag for application to article (col. 3, lines 11-20) comprising in combination: an application specific IC on a die (98, see Fig. 9) having, a write control component for writing information and programming into the IC, a read control component for reading out information from the IC (col. 3, lines 37-57, col. 9, lines 31-68, and col. 11, lines 17-27), and an antenna component (20) for receiving and transmitting information from the IC to a receiver (12), wherein all components are located on the die (col. 11, line 11 to col. 12, line 51).

Regarding claims 6-9, the antenna 20 of Carroll is used for all the claimed functions (col. 6, lines 14-43).

Regarding claims 4, 5 and 10, Carroll discloses a component that stores radio wave energy received by the antenna and powers the ID tag (C1, col. 7, lines 58-66, col. 8, lines 3-7).

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Regarding claims 12 and 13, Carroll discloses a nonvolatile memory (PROM, EEPROM, see col. 9, lines 52-60).

Regarding claim 20, Carroll discloses a clock generator circuit component (col. 4, lines 55-57).

Regarding claim 21, Carroll discloses a shift register circuit component (76).

Claim Rejections - 35 U.S.C. § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11, 14-19, 22 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murdoch (U.S. Pat. No. 5,153,583).

Regarding claim 11, although Murdoch does not disclose that energy can be received from the claimed sources (i.e., microwaves, infrared, visible light and ultraviolet light), such particular energy source is well known in the art and therefore an obvious modification to the ID tag of Murdoch.

Regarding claim 14, although Murdoch does not specifically disclose a multiplexer component, Murdoch in col. 8, lines 16-31 discloses multiple information or data can be extracted

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from the received carrier signal, a multiplexer component for controlling the flow of such information or data would have been obvious to include in the tag of Murdoch.

Regarding claim 15, although Murdoch does not specifically disclose a pulse generating circuit component, providing such well known and well used component in a transponder is extremely well known in the art and therefore an obvious modification to the tag of Murdoch.

Regarding claims 16-19, although Murdoch does not specifically disclose that the receiving and/or transmitting information is in the specific form (e.g., analog or digital), converting one to another by using an A/D or D/A converter is a well known technique in the art and therefore an obvious modification to the tag of Murdoch.

Regarding claim 22, although Murdoch doesn't specifically disclose that the antenna component for transmitting information is a back scatter type antenna, providing a back scatter type antenna in a tag is extremely well known in the art and therefore an obvious modification to the tag of Murdoch.

Regarding claims 24 and 25, although Murdoch does not specifically disclose the claimed materials being used to build or mount the IC on, such materials used in making tags are well known in the art and therefore an obvious modification to the tag of Murdoch depending on the type of article the tag attached to.

Regarding claim 26, although Murdoch does not disclose that the IC contains test and monitoring component points, pads components, control components and circuit components,

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incorporating additional functionality, capability, circuit, or device to the tag is well known in the art and therefore an obvious modification to the tag of Murdoch.

7. Claims 11, 14-19, 22 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carroll (U.S. Pat. No. 4,857,893).

Regarding claim 11, although Carroll does not disclose that energy can be received from the claimed sources (i.e., microwaves, infrared, visible light and ultraviolet light), such particular energy source is well known in the art and therefore an obvious modification to the ID tag of Carroll.

Regarding claims 14 and 15, although Carroll doesn't specifically disclose a multiplexer component for controlling flow of information and data or a pulse generating circuit component, providing such well known and well used components in a transponder is extremely well known in the art and therefore an obvious modification to the tag of Carroll.

Regarding claims 16-19, although Carroll does not specifically disclose that the receiving and/or transmitting information is in the specific form (e.g., analog or digital), converting one to another by using an A/D or D/A converter is a well known technique in the art and therefore an obvious modification to the tag of Carroll.

Regarding claim 22, although Carroll doesn't specifically disclose that the antenna component for transmitting information is a back scatter type antenna, Carroll in lines 1-15 of the abstract discloses a back scatter type signal transmission system.

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Regarding claims 24 and 25, although Carroll does not specifically disclose the claimed materials being used to build or mount the IC on, such materials used in making tags are well known in the art and therefore an obvious modification to the tag of Carroll depending on the type of article the tag attached to.

Regarding claim 26, although Carroll does not disclose that the IC contains test and monitoring component points, pads components, control components and circuit components, incorporating additional functionality, capability, circuit, or device to the tag is well known in the art and therefore an obvious modification to the tag of Carroll.

8. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carroll (U.S. Pat. No.4,857,893) in view of Murdoch (U.S. Pat. No.5,153,583).

Regarding claim 1, Carroll discloses an ID tag as addressed above and differs from the claimed invention in that Carroll doesn't specifically disclose two separate antenna components for receiving and transmitting. However, as evidenced by Murdoch in col. 13, lines 14-17, providing two separate antenna components instead of a single antenna component for receiving and transmitting signals in tag device for better reception and simple circuit design is well known in the art and therefore an obvious modification to the tag of Carroll.

Response to Arguments

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9. Applicant's arguments with respect to claims 1, 3-22 and 24-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. **Any response to this final action should be mailed to:**

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

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or faxed to:

(703) 308-9051, (for formal communications; please mark "EXPEDITED
PROCEDURE")

Or:

(703) 305-3988, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA.,
Sixth Floor (Receptionist).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sihong Huang whose telephone number is (703) 305-3966.

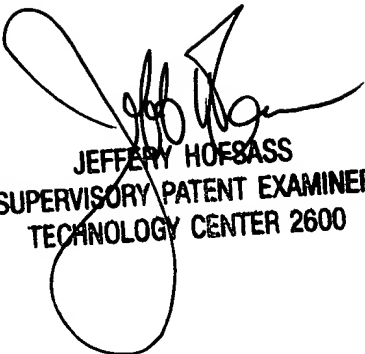
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Hofsass, can be reached on (703) 305-4717.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

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S. Huang

January 12, 2001



JEFFERY HOFBASS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Application/Control Number: 09/396,352

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IMPORTANT NOTICE

Effective October 1, 2000, the Examiner handling this application will be assigned to a new Art Unit as a result of the conversion of Technology Center 2700 into two Technology Centers 2100 and 2600. For any written or facsimile communication submitted ON OR AFTER October 1, 2000, this Examiner, who was assigned to Art Unit **2736**, will be assigned to Art Unit **2632**. Please include the new Art Unit in the caption or heading of any communication submitted after the October 1, 2000 date. Your cooperation in this matter will assist in the timely processing of the submission and is appreciated by the Office.